AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-2. (Cancelled)

3. (Currently Amended) A method for determining optimal harvest window of *Echinacea* plants, wherein the method is used to prepare a standardized *Echinacea* extract, the method ~~comprising~~ consisting essentially of the steps of:

harvesting at least one *Echinacea* plant at a plurality of maturation stages for the *Echinacea* plant;

producing a preparation of the *Echinacea* plant for each maturation stage;

adding a preparation to a monocyte cell culture;

harvesting the cell culture;

analyzing the cell culture for a level of immune-stimulatory product induced by the preparation;

observing the level of the immune-stimulatory product corresponding to each of the different maturation stages;

determining a concentration of a marker compound of each preparation at the plurality of maturation stages, wherein the marker compound is either chlorogenic acid or chicoric acid;

selecting a maturation stage with:

(i) a standardized concentration of at least about 3.40% of ~~the marker compound~~either chlorogenic acid or chicoric acid as measured by high performance liquid chromatography analysis ~~that is used to prepare an extract of the *Echinacea* plant~~; and

(ii) the highest level of immune-stimulatory product;

and preparing a standardized extract of the *Echinacea* plant at the selected maturation stage.

4. (Cancelled)

5. (Cancelled)

6. (Previously Presented) The method of claim 3 wherein the immune-stimulatory product is selected from the group consisting of cytokine mRNA and chemokine mRNA.

7. (Previously Presented) The method of claim 3 wherein the immune-stimulatory product is an mRNA transcript selected from the group consisting of IL-1 alpha, IL-1 beta, IL-6, IL-8, IL-10, tumor necrosis factor alpha, interferon-gamma and macrophage inflammatory protein-1.

8-22. (Cancelled)

23. (Previously Presented) The method of claim 1, wherein the monocyte cell culture is a THP-1 cell culture.

24. (Currently Amended) A method for determining optimal harvest window of *Echinacea* plants, wherein the method is used to prepare a standardized *Echinacea* extract, the method ~~comprising~~ consisting essentially of the steps of:

harvesting at least one *Echinacea* plant at a plurality of maturation stages for the *Echinacea* plant;

producing a preparation of the *Echinacea* plant for each maturation stage;

adding a preparation to a monocyte or macrophage cell culture;

harvesting the cell culture;

analyzing the cell culture for a level of a translation product induced from the cell culture by each preparation;

observing the level of translation product corresponding to each of the different maturation stages;

determining a concentration of a marker compound for each preparation at the plurality of maturation stages, wherein the marker compound is either chlorogenic acid or chicoric acid;

selecting a vegetative maturation stage with:

(i) a standardized concentration of at least about 3.40% of ~~the marker compound~~either chlorogenic acid or chicoric acid as measured by high performance liquid chromatography analysis ~~that is used to prepare an extract of the *Echinacea* plant~~; and

(ii) the highest level of translation product induced from the cell culture;

and preparing a standardized extract of the *Echinacea* plant at the selected maturation stage.

25. (Previously Presented) The method of claim 24, wherein the monocyte or macrophage cell culture is a THP-1 cell culture.

Please add the following new claim:

26. (New) A method of maximizing the immune-stimulatory potential of an *Echinacea* plant extract consisting of:

harvesting an *Echinacea* plant at a vegetative maturation stage; and

preparing a standardized extract of the *Echinacea* plant at the vegetative maturation stage, wherein the standardized extract contains at least about 3.40% of either chlorogenic acid or chicoric acid as measured by high performance liquid chromatography analysis.